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April 4, 2011

Mr. Darren Snow Bitter Creek Pipelines, LLC P.O. Box 131 Glendive, MT 59330

RE: Final Title V Operating Permit #OP3250-03

Dear Mr. Snow:

The Department of Environmental Quality has prepared the enclosed Final Operating Permit #OP3250-03, for Bitter Creek Pipelines, LLC - Symons Central Compressor Station, located three miles southeast of Decker, Montana. Please review the cover page of the attached permit for information pertaining to the action taking place on Permit #OP3250-03.

If you have any questions, please contact Skye Hatten, the permit writer, at (406) 444-5287 or by email at shatten@mt.gov.

Sincerely,

Vickie Walsh

Air Permitting Program Supervisor Air Resources Management Bureau

Vicke Walsh

(406) 444-9741

Skye Hatten, P.E.

**Environmental Engineer** 

Air Resources Management Bureau

(406) 444-5287

VW: SH Enclosure

Cc: Christopher Ajayi, US EPA Region VIII 8P-AR Carson Coate, US EPA Region VIII, Montana Office

Stacy Aguirre, WBI Holdings, Inc., Glendive

STATE OF MONTANA Department of Environmental Quality Helena, Montana 59620

## **AIR QUALITY OPERATING PERMIT OP3250-03**

Issued to: Bitter Creek Pipelines, LLC

**Symons Central Compressor Station** 

P.O. Box 131

Glendive, MT 59330

Final Date: April 2, 2011

Expiration Date: September 17, 2015

Effective Date: April 2, 2011
Date of Decision: March 2, 2011
End of EPA 45-day Review: February 28, 2011
Proposed Issue Date: January 14, 2011
December 10, 2010

Application Deemed Technically Complete: 07/21/2010
Application Deemed Administratively Complete: 07/21/2010
Significant Modification Application Received: 07/21/2010

AFS Number: 030-003-0019A

**Permit Issuance and Appeal Processes:** In accordance with Montana Code Annotated (MCA) Sections 75-2-217 and 218 and the Administrative Rules of Montana (ARM), ARM Title 17, Chapter 8, Subchapter 12, Operating Permit Program, this operating permit is hereby issued by the Department of Environmental Quality (Department) as effective and final on April 2, 2011. This permit must be kept on-site at the above named facility.



OP3250-03

# Montana Air Quality Operating Permit Department of Environmental Quality

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations.

## SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

Company Name: Bitter Creek Pipelines, LLC

Mailing Address: P.O. Box 131

City: **Glendive** State: Montana Zip: 59330

Plant Location: The Symons Central Compressor Station is located approximately 3 miles southeast of Decker, Montana, in Sections 34 and 35, Township 9 South, Range 40 East, in Big Horn County, Montana.

Responsible Official:

**Darren Snow Director of Pipeline Operations, Bitter Creek Pipelines** (701) 530-1559

Facility Contact Person:

**Stacy Aguirre** Manager, Environmental Affairs, WBI Holdings, Inc. (406) 359-7347

Alternate Facility Contact Person:

**Todd Senescall** Environmental Associate, Environmental Affairs, WBI Holdings, Inc. (406) 359-7295

Primary SIC Code: 1311

Nature of Business: Natural Gas Extraction and Transmission

Description of Process:

The BCPL Symons Central Compressor Station Facility is a coal bed methane, natural gas central compressor station. Coal bed methane is a natural hydrocarbon gas, primarily methane that occurs in beds of coal. Production field facilities withdraw the methane from the coal beds and send the methane to the Symons Central Compressor Station Facility to be dehydrated and compressed for transmission through the natural gas pipeline. The two glycol dehydration units are used to remove moisture from the gas and the eight compressor engines are used to boost pipeline pressure for transmitting the natural gas through the pipeline. The Symons Central Compressor Station Facility is not a production field facility; the station simply dehydrates and compresses natural gas that is received from surrounding production field facilities.

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## SECTION II. SUMMARY OF EMISSION UNITS

The emission units regulated by this permit are outlined in the following table (ARM 17.8.1211):

<b>Emissions Unit ID</b>	Description	Pollution Control Device/Practice
EU001	1,680-hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU002	1,680-hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU003	1,680-hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU004	1,680-hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU005	1,680-hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU006	1,680-hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU007	840-hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU008	840-hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller

## SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

## A. Facility-Wide

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	
A.2	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.3	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.4	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.5	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	
A.6	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.7	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	E= 0.882 * H <sup>-0.1664</sup> or E= 1.026 * H <sup>-0.233</sup>
A.8	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E=4.10 * P^{0.67}$ or $E=55 * P^{0.11}$ - 40
A.9	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (Liquid or Solid Fuels)	1 lb/MMBtu Fired
A.10	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (Gaseous)	50 gr/100 CF
A.11	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	
A.12	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	
A.14	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.15	ARM 17.8.1212	Reporting Requirements	Prompt Deviation	
A.16	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	
A.17	ARM 17.8.1207	Reporting Requirements	Annual Certification	

## **Conditions**

A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list "as required by the Department" refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing "as required by the Department" as the frequency, is verified annually using emission factors and engineering calculations by the Department's compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the regular inspection by the compliance inspector.

A.2. Pursuant to ARM 17.8.304(1), BCPL shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.

- A.3. Pursuant to ARM 17.8.304(2), BCPL shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.4. Pursuant to ARM 17.8.308(1), BCPL shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(2), BCPL shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.
- A.6. Pursuant to ARM 17.8.308, BCPL shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.7. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, BCPL shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):  $E = 0.882 * H^{-0.1664}$ 

For new fuel burning equipment (installed on or after November 23, 1968):  $E = 1.026 * H^{-0.233}$ 

Where H is the heat input capacity in million BTU (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

A.8. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, BCPL shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For process weight rates up to 30 tons per hour:  $E = 4.10 * P^{0.67}$ For process weight rates in excess of 30 tons per hour:  $E = 55.0 * P^{0.11} - 40$ 

Where E = rate of emissions in pounds per hour and P = process weight rate in tons per hour.

- A.9. Pursuant to ARM 17.8.322(4), BCPL shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million BTU fired, unless otherwise specified by rule or in this permit.
- A.10. Pursuant to ARM 17.8.322(5), BCPL shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.

- A.11. Pursuant to ARM 17.8.324(3), BCPL shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.
- A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, BCPL shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, BCPL shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order, and in operation.
- A.14. Pursuant to ARM 17.8.342 and 40 CFR 63.6, BCPL shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.
- A.15. BCLP shall promptly report deviations from permit requirements including those attributable to upset conditions, as upset is defined in the permit. To be considered prompt, deviations shall be reported to the Department using the schedule and content as described in Section V.E (unless otherwise specified in an applicable requirement) (ARM 17.8.1212).
- A.16. On or before February 15 and August 15 of each year, BCPL shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by February 15 of each year, BCPL may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

OP3250-03 5 Decision: March 2, 2011 A.17. By February 15 of each year, BCPL shall submit to the Department the compliance certification required by Section V.B. The annual certification required by Section V.B must include a statement of compliance based on the information available that identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

> any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

Effective Date: April 2, 2011

# B. EU001, EU002, EU003, EU004, EU005, and EU006 – 1,680-hp or Less Natural Gas Compressor Engine

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance I Method	Demonstration Frequency	Reporting Requirements
B.1, B.10, B.15, B.21, B.22	Opacity	20%	Burning Pipeline Quality Natural Gas	Ongoing	Semiannual
B.2, B.10, B.15, B.21, B.22	Particulate From Fuel Combustion	$E = 1.026 * H^{0.233}$	Burning Pipeline Quality Natural Gas	Ongoing	Semiannual
B.3, B.10, B.15, B.21, B.22	Sulfur Compounds in Fuel (Gaseous)	<u>50 grains</u> 100 Scf	Burning Pipeline Quality Natural Gas	Ongoing	Semiannual
B.4, B.11, B.14, B.16, B.20, B.21, B.22	NO <sub>x</sub> (lb/hr)	1.0 g/bhp-hr * bhp * 0.002205 lb/g	Portable Analyzer	Semiannual	Semiannual
B.5, B.11, B.14, B.16, B.20, B.21, B.22	CO (lb/hr)	2.0 g/bhp-hr * bhp * 0.002205 lb/g	Portable Analyzer	Semiannual	Semiannual
B.6, B.10, B.15, B.21, B.22	VOC (lb/hr)	0.5 g/bhp-hr * bhp * 0.002205 lb/g	Burning Pipeline Quality Natural Gas	Ongoing	Semiannual
B.7, B.12, B.17, B.21, B.22	Emissions Control	NSCR Unit and AFR Controller	Maintenance Log	Ongoing	Semiannual
B.8, B.11, B.14, B.16, B.18, B.20, B.21, B.22	Engine Replacement	10 Day Prior Notice	Written Notification/ Portable Analyzer	At Occurrence	Semiannual
B.9, B.13, B.19, B.21, B.22	NO <sub>x</sub> and CO CAM Plan	CAM Plan Appendix E	CAM Plan Appendix E	Ongoing	Semiannual

## **Conditions**

- B.1. BCPL shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- B.2. BCPL shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of E = 1.026 \* H <sup>0.233</sup> for new fuel burning equipment, where: H= heat input capacity in million British thermal units per hour (MMBtu/hr) and E = maximum allowable particulate emission rate in pounds per million British thermal units (lb/MMBtu) (ARM 17.8.309).
- B.3. BCPL shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 standard cubic feet (Scf) of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- B.4. Oxides of nitrogen (NO<sub>x</sub>) emissions from each of the six 1,680-Horsepower (hp) or Less Natural Gas Compressor Engines shall not exceed the limit as calculated by the following equation (ARM 17.8.749 and ARM 17.8.752).

Emission Limit (in pounds per hour (lb/hr)) = 1.0 grams per brake horsepower-hour (g/bhp-hr) \* maximum rated capacity of engine (brake hp (bhp)) \* 0.002205 pounds per gram (lb/g)

- B.5. Carbon monoxide (CO) emissions from each of the six 1,680-hp or Less Natural Gas Compressor Engines shall not exceed the limit as calculated by the following equation (ARM 17.8.749 and ARM 17.8.752).
  - Emission Limit (lb/hr) = 2.0 g/bhp-hr \* maximum rated capacity of engine (bhp) \* 0.002205 lb/g
- B.6. Volatile Organic Compound (VOC) emissions from each of the six 1.680-hp or Less Natural Gas Compressor Engines shall not exceed the limit as calculated by the following equation (ARM 17.8.749 and ARM 17.8.752).
  - Emission Limit (lb/hr) = 0.5 g/bhp-hr \* maximum rated capacity of engine (bhp) \* 0.002205 lb/g
- B.7. Emissions from each of the six 1,680-hp or Less Natural Gas Compressor Engines shall be controlled with a non-selective catalytic reduction (NSCR) unit and an air-to-fuel ratio (AFR) controller (ARM 17.8.752).
- B.8. BCPL shall notify the Department, in writing, 10 days prior to replacing the engine and the notification shall include the make, model, and horsepower ratings of the engines involved. The notification shall also include the actual dates of installation and identify the engines by the emitting unit numbers contained in Section II of this permit (ARM 17.8.745 and ARM 17.8.1215).
- B.9. For the operation of each of the six 1,680-hp or Less Natural Gas Compressor Engines, BCPL shall provide reasonable assurance with the emissions limitations in Sections III.B.4 and III.B.5 by following the Compliance Assurance Monitoring (CAM) plan contained in Appendix E of this permit (ARM 17.8.1504).

## **Compliance Demonstration**

- B.10. Monitoring compliance with the opacity, particulate from fuel combustion, sulfur compounds in fuel requirements (gaseous), and VOC limitation requirements (Sections III.B.1, III.B.2, III.B.3, and III.B.6) may be satisfied by burning pipeline quality natural gas (as defined by BCPL's longhaul pipeline contracts) on an ongoing basis (ARM 17.8.1213).
- Semiannually or whenever changes are made that may cause emissions to exceed permitted levels, including replacing an engine according to Section III.B.8, BCPL shall conduct an emissions test with a portable analyzer in order to monitor the NO<sub>x</sub> and CO emissions from the compressor engines. The portable analyzer shall be capable of achieving performance specifications equivalent to EPA traditional methods defined in 40 CFR 60, Appendix A, or shall be capable of meeting the requirements of EPA Conditional Test Method 030 for the "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers." BCPL may use another testing procedure as approved in advance by the Department. All compliance tests must be conducted in accordance to the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). BCPL shall monitor compliance with the NO<sub>x</sub> and CO limitations in Sections III.B.4 and III.B.5 for the compressor engines by converting the emissions test results (ppm) to a mass emissions rate (lb/hr). Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A (ARM 17.8.1213 and ARM 17.8.1215).
- Monitoring compliance with the emission control requirements shall be satisfied by installing, operating, and maintaining an NSCR unit and an AFR controller on each of the six 1,680-hp or less natural gas compressor engines. BCPL shall maintain a log of any maintenance activities performed as described in Section III.B.15 (ARM 17.8.1213).

BCPL shall monitor compliance with Sections III.B.4, III.B.5, III.B.7, and III.B.9 by monitoring the indicators according to the CAM plan contained in Appendix E of this permit (ARM 17.8.1503 and ARM 17.8.1213).

## Recordkeeping

- All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- B.15. BCPL shall maintain on site, a record noting any instance in which any fuel other than pipeline quality natural gas was used in each of the six 1680-hp or less natural gas compressor engines to monitor compliance with Sections III.B.1, III.B.2, III.B.3, and III.B.6. The record shall include emitting unit number, date, time, duration, reason for other fuel use, and operator's initials (ARM 17.8.1212).
- During the emissions tests described in Sections III.B.4 and III.B.5, BCPL shall record information for the compressor engine and portable analyzer as described in the Montana Source Test Protocol and Procedures Manual or an alternative procedure submitted by BCPL and approved by the Department (ARM 17.8.1212).
- BCPL shall maintain a record verifying that the NSCR unit and AFR controller on each of the 1,680-hp or less natural gas compressor engines were operated and maintained to monitor compliance with Section III.B.7. The record shall include the following information (ARM 17.8.1212):
  - Name and company of the person performing the maintenance; a.
  - Maintenance activities that were performed; and b.
  - c. Date that the maintenance occurred.
- BCPL shall maintain, on site, a log of all engine replacements performed according to Section III.B.8. The log shall contain the information required in Section III.B.8 (ARM 17.8.1212 and ARM 17.8.1215).
- BCPL shall maintain records in accordance with ARM 17.8.1513 and the CAM plan contained in Appendix E of this permit (ARM 17.8.1212 and ARM 17.8.1513).

## Reporting

- B.20. All compliance source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- B.21. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements.
- B.22. The semiannual monitoring reporting shall provide (ARM 17.8.1212):
  - a. A summary of the results of the last source testing that was performed;
  - b. Any instance in which fuel(s) other than pipeline quality natural gas were used to fuel any of the compressor engines as required by III.B.13;

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- c. Any instance in which the AFR controller and the NSCR were not both continuously operated as required by Section III.B.11;
- d. A summary of any maintenance performed on the NSCR units and AFR controllers as required by Section III.B.15.
- A summary of engine replacement notifications (date and engine replaced) as required by e. Sections III.B.8 and III.B.16.
- f. A summary of any reporting required by the CAM plan for excursions outside of indicator ranges during that semiannual period.

Effective Date: April 2, 2011

## C. EU007 and EU008 – 840-hp or Less Natural Gas Compressor Engines

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance I Method	Demonstration Frequency	Reporting Requirements
C.1, C.9, C.13, C.18, C.19	Opacity	20%	Burning Pipeline Quality Natural Gas	Ongoing	Semiannual
C.2, C.9, C.13, C.18, C.19	Particulate From Fuel Combustion	$E = 1.026 * H^{0.233}$	Burning Pipeline Quality Natural Gas	Ongoing	Semiannual
C.3, C.9, C.13, C.18, C.19	Sulfur Compounds in Fuel (Gaseous)	<u>50 grains</u> 100Scf	Burning Pipeline Quality Natural Gas	Ongoing	Semiannual
C.4, C.10, C.12, C.14, C17, C18, C.19	NO <sub>x</sub> (lb/hr)	1.0 g/bhp-hr * bhp * 0.002205 lb/g	Portable Analyzer	Semiannual	Semiannual
C.5, C.10, C.12, C.14, C17, C18, C.19	CO (lb/hr)	2.0 g/bhp-hr * bhp * 0.002205 lb/g	Portable Analyzer	Semiannual	Semiannual
C.6, C.9, C.13, C.18, C.19	VOC (lb/hr)	1.0 g/bhp-hr * bhp * 0.002205 lb/g	Burning Pipeline Quality Natural Gas	Ongoing	Semiannual
C.7, C.11, C.15, C.18, C.19	Emissions Control	NSCR Unit and AFR Controller	Maintenance Log	Ongoing	Semiannual
C.8, C.10, C.12, C.14, C16, C17, C18, C.19	Engine Replacement	10 Day Prior Notice	Written Notification/ Portable Analyzer	At Occurrence	Semiannual

## **Conditions**

- C.1. BCPL shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- C.2. BCPL shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of  $E = 1.026 * H^{0.233}$  for new fuel burning equipment, where: H= heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- C.3. BCPL shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 Scf of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- C.4. NO<sub>x</sub> emissions from each of the two natural gas compressor engines equal to, or less than 840-hp, shall not exceed the limit as calculated by the following equation (ARM 17.8.749 and ARM 17.8.752).
  - Emission Limit (lb/hr) = 1.0 g/bhp-hr \* maximum rated capacity of engine (bhp) \* 0.002205 lb/g
- C.5. CO emissions from each of the two natural gas compressor engines equal to, or less than 840-hp, shall not exceed the limit as calculated by the following equation (ARM 17.8.749 and ARM 17.8.752).
  - Emission Limit (lb/hr) = 2.0 g/bhp-hr \* maximum rated capacity of engine (bhp) \* 0.002205 lb/g

- C.6. VOC emissions from each of the two natural gas compressor engines equal to, or less than 840-hp, shall not exceed the limit as calculated by the following equation (ARM 17.8.749 and ARM 17.8.752).
  - Emission Limit (lb/hr) = 1.0 g/bhp-hr \* maximum rated capacity of engine (bhp) \* 0.002205 lb/g
- C.7. Emissions from each of the two natural gas compressor engines equal to, or less than 840-hp, shall be controlled with a NSCR unit and an AFR controller (ARM 17.8.752).
- C.8. When replacing an 840-hp or less compressor engine, only compressor engines equal to, or less than 840-hp can be used. BCPL shall notify the Department, in writing, 10 days prior to replacing the engine and the notification shall include the make, model, and horsepower ratings of the engines involved. The notification shall also include the actual dates of installation and identify the engines by the emitting unit numbers contained in Section II of this permit (ARM 17.8.745 and ARM 17.8.1215).

## **Compliance Demonstration**

- C.9. Monitoring compliance with the opacity, particulate from fuel combustion, sulfur compounds in fuel requirements (gaseous), and VOC limitation requirements (Sections III.C.1, III.C.2, III.C.3, and III.C.6) may be satisfied by burning pipeline quality natural gas (as defined by BCPL's longhaul pipeline contracts) on an ongoing basis (ARM 17.8.1213).
- C.10. Semiannually or whenever changes are made that may cause emissions to exceed permitted levels, including replacing an engine according to Section III.C.8, BCPL shall conduct an emissions test with a portable analyzer in order to monitor the NO<sub>x</sub> and CO emissions from the compressor engines. The portable analyzer shall be capable of achieving performance specifications equivalent to EPA traditional methods defined in 40 CFR 60, Appendix A, or shall be capable of meeting the requirements of EPA Conditional Test Method 030 for the "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers." BCPL may use another testing procedure as approved in advance by the Department. All compliance tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). BCPL shall monitor compliance with the NO<sub>x</sub> and CO limitations in Sections III.C.4 and III.C.5 for the compressor engines by converting the emissions test results (ppm) to a mass emissions rate (lb/hr). Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A (ARM 17.8.1213 and ARM 17.8.1215).
- C.11. Monitoring compliance with the emission control requirements shall be satisfied by installing, operating, and maintaining an NSCR unit and an AFR controller on each of the two natural gas compressor engines equal to, or less than 840-hp. BCPL shall maintain a log of any maintenance activities performed as described in Section III.C.15 (ARM 17.8.1213).

## Recordkeeping

- C.12. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- C.13. BCPL shall maintain on site, a record noting any instance in which any fuel other than pipeline quality natural gas was used in each of the 840-hp or less natural gas compressor engines to monitor compliance with Sections III.C.1, III.C.2, III.C.3, and III.C.6. The record shall include emitting unit number, date, time, duration, reason for other fuel use, and operator's initials (ARM 17.8.1212).

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- C.14. During the emissions tests described in Sections III.C.4 and III.C.5, BCPL shall record information for the compressor engine and portable analyzer as described in the Montana Source Test Protocol and Procedures Manual or an alternative procedure submitted by BCPL and approved by the Department (ARM 17.8.1212).
- C.15. BCPL shall maintain a record verifying that the NSCR unit and AFR controller on each of the two natural gas compressor engines equal to, or less than 840-hp, were operated and maintained to monitor compliance with Section III.C.7. The record shall include the following information (ARM 17.8.1212):
  - a. Name and company of the person performing the maintenance;
  - b. Maintenance activities that were performed; and
  - c. Date that the maintenance occurred.
- C.16. BCPL shall maintain, on site, a log of all engine replacements performed according to Section III.C.8. The log shall contain the information required in Section III.C.8 (ARM 17.8.1212 and ARM 17.8.1215).

## Reporting

- C.17. All compliance source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- C.18. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.
- C.19. The semiannual monitoring reporting shall provide (ARM 17.8.1212):
  - A summary of the results of the last source testing that was performed; a.
  - b. Any instance in which fuel(s) other than pipeline quality natural gas were used to fuel any of the compressor engines as required by III.C.13;
  - Any instance in which the AFR controller and the NSCR were not both continuously c. operated as required by Section III.C.11;
  - d. A summary of any maintenance performed on the NSCR units and AFR controllers as required by Section III.C.15.
  - A summary of engine replacement notifications (date and engine replaced) as required by e. Sections III.C.8 and III.C.16.

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## SECTION IV. NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rule of Montana (ARM) and Federal Regulations identified in the permit application as not applicable (as concurred by the Department of Environmental Quality (Department) to the facility or to a specific emissions unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

### Facility-Wide A.

The following table contains non-applicable requirements, identified in the permit application (as concurred by the Department), which are administrated by the Air Resources Management Bureau of the Department.

Rule Citation	Reason
40 CFR Part 60, Subpart KKK 40 CFR Part 60, Subpart LLL	The facility is not in this source category.

#### В. **Emission Units**

The permit application identified applicable requirements. Non-applicable requirements for individual or specific emission units were not listed. The Department has listed all non-applicable requirements in Section IV.A. These requirements relate to each specific unit, as well as facility wide.

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#### SECTION V. GENERAL PERMIT CONDITIONS

## A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

- The permittee must comply with all conditions of the permit. Any noncompliance with the 1. terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
- 2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
- The permittee shall furnish to the Department, within a reasonable time set by the Department 4. (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
- 5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
- 6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

## **B.** Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

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- 2. Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 December 31).
- 3. Compliance certifications shall include the following:
  - a. The identification of each term or condition of the permit that is the basis of the certification:
  - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term and condition during the certification period, consistent with ARM 17.8.1212;
  - c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and
  - d. Such other facts as the Department may require to determine the compliance status of the source.
- 4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

## C. Permit Shield

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

- 1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
- 2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
- 3. Nothing in this permit alters or affects the following:
  - a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA;
  - d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA;

- e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA;
- f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA; and
- g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
- 4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
- 5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
- 6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
- 7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & O).

# D. Monitoring, Recordkeeping, and Reporting Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1212(2)&(3)

- 1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
  - a. The date, place as defined in the permit, and time of sampling or measurement;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions at the time of sampling or measurement.
- 2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports

and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

## **E.** Prompt Deviation Reporting

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(b)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported to the Department within the following timeframes (unless otherwise specified in an applicable requirement):

- 1. For deviations which may result in emissions potentially in violation of permit limitations:
  - a. An initial phone notification (or faxed or electronic notification) describing the incident within 24 hours (or the next business day) of discovery; and,
  - b. A follow-up written, faxed, or electronic report within 30 days of discovery of the deviation that describes the probable cause of the reported deviation and any corrective actions or preventative measures taken.
- 2. For deviations attributable to malfunctions, deviations shall be reported to the Department in accordance with the malfunction reporting requirements under ARM 17.8.110; and
- 3. For all other deviations, deviations shall be reported to the Department via a written, faxed, or electronic report within 90 days of discovery (as determined through routine internal review by the permittee).

Prompt deviation reports do not need to be resubmitted with regular semiannual (or other routine) reports, but may be referenced by the date of submittal.

## F. Emergency Provisions

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technologybased emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.

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- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
  - a. An emergency occurred and the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and
  - d. The permittee submitted notice of the emergency to the Department within two working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

## **G.** Inspection and Entry

ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

- 1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
  - a. Enter the premises where a source required to obtain a permit is located or emissionsrelated activity is conducted, or where records must be kept under the conditions of the permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
  - c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.
- 2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

## H. Fee Payment

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.

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- 2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
- 3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

## I. Minor Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

- 1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.
- 2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

## J. Changes Not Requiring Permit Revision

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

- 1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met:
  - The proposed changes do not require the permittee to obtain a Montana Air Quality Permit under ARM Title 17, Chapter 8, Subchapter 7;
  - The proposed changes are not modifications under Title I of the FCAA, or as defined in b. ARM Title 17, Chapter 8, Subchapters 8, 9, or 10;
  - The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions;
  - The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit; and
  - The facility provides the administrator and the Department with written notification at least e. seven days prior to making the proposed changes.
- 2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
- 3. Pursuant to the conditions above, the permittee is authorized to make Sec. 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

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- 4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:
  - Each proposed change does not weaken the enforceability of any existing permit conditions:
  - b. The Department has not objected to such change;
  - Each proposed change meets all applicable requirements and does not violate any existing c. permit term or condition; and
  - The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- 5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

## **K.** Significant Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

- The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
  - Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment:
  - b. Every significant change in existing permit monitoring terms or conditions;
  - Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or
  - Any other change determined by the Department to be significant.
- 2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
- 3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

## L. Reopening for Cause

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances:

1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of three or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable

requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2):

- 2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;
- 3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or
- 4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

## M. Permit Expiration and Renewal

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

- This permit is issued for a fixed term of 5 years. 1.
- 2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
- 3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
- 4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than six months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least one year before the renewal application due date established in the existing permit.

## N. Severability Clause

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

- 1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
- If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

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## O. Transfer or Assignment of Ownership

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

- 1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
- 2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

## P. Emissions Trading, Marketable Permits, Economic Incentives

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

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## Q. No Property Rights Conveyed

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

## **R.** Testing Requirements

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

## S. Source Testing Protocol

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

## T. Malfunctions

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

## **U.** Circumvention

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

## V. Motor Vehicles

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

## W. Annual Emissions Inventory

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

## X. Open Burning

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

## Y. Montana Air Quality Permits

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764 (ARM 17.8.745(1) and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

- 1. Except as specified, no person shall construct, install, modify or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).
- The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764. 2.
- 3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding a Montana Air Quality Permit (MAQP) issued under Chapter 8 that does not increase the facility's potential to emit by more than 5 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):
  - Any construction or changed condition that would violate any condition in the facility's existing MAQP or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);
  - Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;
  - Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;
  - Any construction or improvement project with a potential to emit more than 5 tons per year may not be artificially split into smaller projects to avoid Montana Air Quality Permitting;
  - Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.
- 4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

OP3250-03 Effective Date: April 2, 2011 The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1) (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP).

## Z. National Emission Standard for Asbestos

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

## AA. Asbestos

ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, et seq., and ARM 17.74.401, et seq. (State only)

# BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners 40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

# CC. Stratospheric Ozone Protection – Recycling and Emission Reductions 40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

- 1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156;
- 2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;
- 3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161;
- 4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166;
- 5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
- 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

## DD. Emergency Episode Plan

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

## **EE. Definitions**

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

Effective Date: April 2, 2011

# **APPENDICES**

## Appendix A INSIGNIFICANT EMISSION UNITS

**Disclaimer:** The information in this appendix is not State or Federally enforceable, but is presented to assist BCPL, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than 5 tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to Sec. 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

## **List of Insignificant Activities:**

The following table of insignificant sources and/or activities were provided by BCPL. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

Emissions Unit ID	Description
IEU01	1 MMBtu/hr Dehydration Unit #1
IEU02	(1) 1000-Gallon Triethylene Glycol Tank
IEU03	(4) 275-Gallon Engine Jacket Water (EG/water) Tanks
IEU04	(2) 550-Gallon Ethylene Glycol (EG/water makeup) Tanks
IEU05	(4) 275-Gallon Compressor Crankcase Oil Tanks
IEU06	(4) 275-Gallon Engine Crankcase Oil Tanks
IEU07	(4) 275-Gallon Used Oil Tanks
IEU08	(2) 500-Gallon Used Oil Tanks
IEU09	(2) 450-Gallon Compressor Lubricator Oil Tanks
IEU10	(3) 150-Gallon Waste Oil Tanks
IEU11	(1) 535-Gallon Used Oil Tank
IEU12	(1) 1050-Gallon Used Oil Tank
IEU13	(1) 1500-Gallon Used Oil Tank
IEU14	(1) 400-Barrel Produced Water Tank
IEU15	(1) 400-Barrel Water/Oil Mix Holding Tank
IEU16	(1) 500,000 Btu/hr Produced Water Tank Heater
IEU17	(1) 500,000 Btu/hr Water/Oil Mix Holding Tank Heater
IEU18	(1) 0.78 MMBtu/hr Cimarron 3 Coil Evaporator Unit
IEU19	(1) 0.18 MMBtu/hr Sebring Heat Wave Used Oil Burner

## **Appendix B DEFINITIONS and ABBREVIATIONS**

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, et seq.

"Administrative permit amendment" means an air quality operating permit revision that:

- (a) Corrects typographical errors;
- (b) Identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source;
- (c) Requires more frequent monitoring or reporting by BCPL;
- (d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements;
- (e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225; or
- (f) Incorporates any other type of change that the Department has determined to be similar to those revisions set forth in (a)-(e), above.
- "Applicable requirement" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):
  - (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
  - (b) Any federally enforceable term, condition or other requirement of any Montana Air Quality Permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D;
  - (c) Any standard or other requirement under Sec. 7411 of the FCAA, including Sec. 7411(d);
  - (d) Any standard or other requirement under Sec. 7412 of the FCAA, including any requirement concerning accident prevention under Sec. 7412(r)(7), but excluding the contents of any risk management plan required under Sec. 7412(r);
  - (e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;
  - (f) Any requirements established pursuant to Sec. 7661c(b) or Sec. 7414(a)(3) of the FCAA;
  - (g) Any standard or other requirement governing solid waste incineration, under Sec. 7429 of the FCAA:
  - (h) Any standard or other requirement for consumer and commercial products, under Sec. 7511b(e) of the FCAA;
  - (i) Any standard or other requirement for tank vessels, under Sec. 7511b(f) of the FCAA;

- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Sec. 7661c(e) of the FCAA; or
- (1) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under Subchapter 6.
- "Department" means the Montana Department of Environmental Quality.
- "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Sec. 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.
- "FCAA" means the Federal Clean Air Act, as amended.
- "Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana state implementation plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana state implementation plan and expressly requires adherence to any permit issued under such program.
- "Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- "General air quality operating permit" or "general permit" means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.
- **"Hazardous air pollutant"** means any air pollutant listed as a hazardous air pollutant pursuant to Sec. 112(b) of the FCAA.
- **"Non-federally enforceable requirement"** means the following as they apply to emission units in a source requiring an air quality operating permit:
  - (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
  - (b) Any term, condition or other requirement contained in any Montana Air Quality Permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable;
  - (c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter.

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"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

## "Regulated air pollutant" means the following:

- (a) Nitrogen oxides or any volatile organic compounds;
- (b) Any pollutant for which a national ambient air quality standard has been promulgated;
- (c) Any pollutant that is subject to any standard promulgated under Sec. 7411 of the FCAA;
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or
- (e) Any pollutant subject to a standard or other requirement established or promulgated under Sec. 7412 of the FCAA, including but not limited to the following:
  - (i) Any pollutant subject to requirements under Sec. 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Sec. 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Sec. 7412(e) of the FCAA;
  - (ii) Any pollutant for which the requirements of Sec. 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Sec. 7412(g)(2) requirement.

## "Responsible official" means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
  - (ii) The delegation of authority to such representative is approved in advance by the Department.
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

OP3250-03 B-3 Effective Date: April 2, 2011

## **Abbreviations:**

**ARM** Administrative Rules of Montana **ASTM** American Society of Testing Materials **BACT** Best Available Control Technology

**BDT** bone dry tons

**British Thermal Unit BTU** 

**CFR** Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality

dry standard cubic foot dscf

dscfm dry standard cubic foot per minute **EEAP Emergency Episode Action Plan EPA** U.S. Environmental Protection Agency

EPA Method Test methods contained in 40 CFR 60, Appendix A

EU emissions unit

**FCAA** Federal Clean Air Act

grains gr

HAP hazardous air pollutant **IEU** insignificant emissions unit

thousand board feet Mbdft

40 CFR 60, Appendix A, Method 5 Method 5 Method 9 40 CFR 60, Appendix A, Method 9

million board feet MMbdft

**MMBTU** million British Thermal Units

oxides of nitrogen NOx nitrogen dioxide  $NO_2$ 

oxygen  $O_2$ Pb lead

PM particulate matter

PM10 particulate matter less than 10 microns in size

pounds per square inch psi scf standard cubic feet

Source Industrial Classification SIC

 $SO_2$ sulfur dioxide SOx oxides of sulfur tons per year tpy U.S.C. **United States Code** VE visible emissions

VOC volatile organic compound

Effective Date: April 2, 2011

### Appendix C NOTIFICATION ADDRESSES

## Compliance Notifications:

Montana Department of Environmental Quality Permitting and Compliance Division Air Resources Management Bureau P.O. Box 200901 Helena, MT 59620-0901

United States EPA Air Program Coordinator Region VIII, Montana Office 10 W. 15<sup>th</sup> Street, Suite 3200 Helena, MT 59626

## Permit Modifications:

Montana Department of Environmental Quality Permitting and Compliance Division Air Resources Management Bureau P.O. Box 200901 Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance Air and Radiation Program US EPA Region VIII 8P-AR 1595 Wynkoop Street Denver, CO 80202-1129

C-1 OP3250-03 Decision: March 2, 2011

#### Appendix D AIR QUALITY INSPECTOR INFORMATION

**Disclaimer:** The information in this appendix is not State or Federally enforceable, but is presented to assist BCPL, permitting authority, inspectors, and the public.

- 1. Direction to Plant: The facility is located approximately 3 miles southeast of Decker, Montana, in Sections 34 and 35, Township 9 South, Range 40 East, in Big Horn County, Montana. To access the facility from Decker, Montana, take MT Highway 314 east-northeast for approximately 2.7 miles, turn right on county road, cross the Tongue River and proceed for approximately 0.7 miles. Turn right and proceed south approximately 2.5 miles to the fork in the road. Take the right fork and proceed south and west for approximately 3.5 miles. Turn right off of main county road and drive northwest for approximately 0.4 miles, turn right, and drive approximately 0.6 miles to the facility.
- 2. Safety Equipment Required: A hard hat, steel-toed boots/shoes, and hearing protection are required to enter the facility property.
- 3. Facility Plot Plan: A facility plot plan for the Symons Central Compressor Station was provided by BCPL on April 4, 2003, as part of the Title V Operating Permit Application

OP3250-03 D-1 Decision: March 2, 2011

Effective Date: April 2, 2011

## Appendix E COMPLIANCE ASSURANCE MONITORING (CAM)

## Symons Compressor Station Units #1-#6 (EU01-EU06) Compliance Assurance Monitoring (CAM) Plan

## I. Background

## **Emissions Unit**

Description: Units #1-#6 - Waukesha 7044 GSI, 4-Stroke Rich Burn (1680 hp) Natural Gas

Compressor Engine

EU01-EU06 Equipment ID:

Facility: **Symons Compressor Station** 

## Applicable Requirement, Emission Limits, and Monitoring Requirements

Requirement: Montana Air Quality Operating Permit Number OP3250-03

**Emission Limits:** Units #1-#6:  $NO_x$ : 1.0 g/bhp-hr \* bhp \* 0.00205 lb/g

> 2.0 g/bhp-hr \* bhp \* 0.00205 lb/g CO:

Monitoring Requirements: Administrative Rules of Montana Chapter 17.8, Air Quality,

> Subchapter 15 - Compliance Assurance Monitoring 40 CFR Part 64 – Compliance Assurance Monitoring

## **Control Technology**

All engines use Non Selective Catalytic Reduction with Air Fuel Ratio Control (NSCR w/AFRC)

## II. Monitoring Approach

## **Indicator #1: Pressure drop across the catalyst**

## **Measurement Approach:**

Pressure drop across the catalyst is used as an indicator because a change in pressure drop can indicate that the catalyst is becoming fouled or channeled, slowing gas flow through the catalyst and lowering its effectiveness. Pressure readings are taken pre and post catalyst and the differential is figured. Pressure measurements are taken monthly using a manometer.

**Indicator Range:** +/- 2 inches of water from the benchmark pressure difference.

The baseline pressure difference will be established at a reasonably high load condition and the conditions recorded. These load conditions will be matched for all subsequent measurements of pressure difference across the catalyst.

It may be necessary to set a new baseline pressure differential across the catalyst for reasons such as, including but not limited to, catalyst change out, reinstallation, or new load conditions are encountered. Records will be kept of such instances in which a new baseline is set, and the reasons for the new baseline.

OP3250-03 E-1Decision: March 2, 2011 The presumptively acceptable monitoring range for this indicator as established in 40 CFR Part 63 is a difference of more than +/- 2 inches of water from the baseline pressure differential. A differential outside this range indicates the catalyst may be damaged or fouled and no long effective.

## **Data Representativeness:**

Pressure measurements are taken in the exhaust piping at the catalyst inlet and outlet and the difference between the two values is determined. For this measurement, engine load and speed conditions from the baseline will be matched.

## O/A and O/C Practices:

Calibrate manometer once a year. Pressure measurements are accurate within +/- 0.5 in. water.

## **Monitoring Frequency:**

Monthly measurement of pressure drop is considered presumptively acceptable monitoring per 40 CFR Part 63 so pressure readings will be taken monthly on this unit while it is operating. If the unit is not operating, it will not be started for the purpose of taking monthly pressure readings for this CAM Plan. If, upon starting the engine, pressure readings have not been taken for the current month, they will be taken the day the engine is started.

## **Averaging Period:**

None, not to exceed +/- 2 inches of water pressure difference across the catalyst from the baseline differential.

## **Data Collection Procedures:**

Records are maintained on a log sheet to document monthly readings and any required maintenance.

## **Indicator #2: Temperature of exhaust gas into catalyst**

## **Measurement Approach:**

Catalyst inlet temperature is measured as an indicator since sintering can occur if the catalyst is operated at a temperature that is too high. Damage to the catalyst from sintering would lower or eliminate its effectiveness. Also, if the temperature at the catalyst inlet is too low, the chemical reactions required to remove pollutants from the exhaust stream may not occur. Exhaust gas temperature is measured daily using an in-line thermocouple.

**Indicator Range**: Range is above 750°F, but lower than 1250°F.

This is the presumptively acceptable range for this indicator based on 40 CFR Part 63 for four stroke richburn stationary RICE's.

## **Data Representativeness:**

Temperature is measured at the inlet of the catalyst using an inline thermocouple.

## Q/A and Q/C Practices:

Thermocouple is calibrated annually. The thermocouple has an accuracy of +/- 5°F.

## **Monitoring Frequency:**

The exhaust temperature at the catalyst inlet is measured once daily while the engine is operating.

This unit has controlled emissions of less than 100 TPY so CAM regulations requires temperature be measured once every 24 hours.

OP3250-03 E-2 Decision: March 2, 2011

## **Averaging Period:**

None, temperature is to remain within range.

## **Data Collection Procedures:**

Temperature at the catalyst inlet is recorded and stored electronically once daily.

## Indicator #3: Semi-annual Portable Analyzer or Reference Method Tests for NO<sub>x</sub> and CO

## **Measurement Approach:**

A direct measurement of pollutants in the exhaust stream is taken, post catalyst, to determine compliance with permit limits. Emission test results will also validate Indicators #1 and #2 when these measurements are taken at time of the test.

Emission tests are performed semi-annually using the equipment and methods specified in the a protocol approved by the Montana Department of Environmental Quality in accordance with the Montana Source Test Protocol and Procedures Manual.

## **Indicator Range:**

Designated conditions for this indicator are the permit limits for NO<sub>x</sub> and CO stated above.

## **Data Representativeness:**

Analyzer probe removes exhaust sample from a point downstream of the catalyst and upstream of the gas discharge to the atmosphere.

## O/A and O/C Practices:

Refer to the test protocol approved by the Montana Department of Environmental Quality.

## **Monitoring Frequency:**

Emission tests are preformed semi-annually as required by Montana Air Quality Operating Permit Number OP3250-03.

## **Averaging Period:**

None, not to exceed permit limits.

## **Data Collection Procedures:**

Refer to the test protocol approved by the Montana Department of Environmental Quality.

## **III. Response to Excursions**

Excursions outside of the indicator ranges will trigger an inspection and trouble-shooting of catalyst and AFR controller, corrective action if necessary, and reporting. Maintenance personnel will inspect the engines, the catalytic converters, and the AFR controllers within 24 hours of discovery of an excursion and will make needed repairs as soon as practicable. Operation will return to normal upon completed corrective action.

OP3250-03 E-3 Decision: March 2, 2011